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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,060	08/02/2004	Klemens Sensen	P69752US0	4233
136	7590	10/05/2005	EXAMINER	
JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004			EASHOO, MARK	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/502,060

Applicant(s)

SENSEN ET AL.

Examiner

Mark Eashoo, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 10-NOV-2004 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. Accordingly, it has been placed in the application file and the information referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims appear to be directed to a process of assembling two components but fails to recite a series of process steps. However, the claims recite only apparatus structure. As such the claims are indefinite because it cannot be clearly ascertained if the claims are directed to a 'process of assembly' or that of an 'apparatus'. For the purpose of further examination, the claims have been interpreted as being directed to a 'process of assembly'.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice (US Pat. 3,932,103) in view of Smith (EP 0 626 247 A1).

Rice teaches the basic mutual fixation of at least two components which together border areas for carrying a plastic melt in a tubular film die (fig. 2); and a fastening member that is structured to carry a fluid (eg. coolant) (fig. 2, elements 43 and 45). It is intrinsic that the Rice provides a process of assembling the structure of figure 2.

Rice does not teach both inlet and outlet passages for a blown film die. However, Smith teaches both inlet and outlet passages for a blown film die (figs. 2-3). Rice and Smith are combinable because they are from the same field of endeavor, namely, blown film dies. At the time of invention a person of ordinary skill in the art would have found it obvious to have provided another passage, like the first, in the structure of Rice, and would have been motivated to do so because Smith suggests that multiple passages may be used for both inlet and exhaust of a film cooling fluid thereby providing accurate temperature control of the formed film.

Although Rice is silent with respect to the amount of force/torque (ie. lower force) used to mount the structures for fixation is submitted that the optimal torque would have been provided in order to prevent leaking or the extruded resin through the joint between the fixed parts and not so tight so as to damage the fasteners.

Lastly, it is submitted that the figure 2 of Rice suggests that the die parts, including the bolts, are made of steel/metal. As such it is intrinsic that they are capable of expanding if heated or cooled during operation.

Claims 1, 3, 4, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice (US Pat. 3,932,103) in view of Smith (EP 0 626 247 A1).

Rice teaches a basic tubular film die head comprising: at least two components which together border areas for carrying a plastic melt in a tubular film die (fig. 2); an annular die gap (fig. 2); cavities in a fastener and inner walls of a die head (fig. 2); circular and/or cylindrical fasteners/bolts disposed eccentrically about the die (fig. 2); and a fastening member that is structured to carry a fluid (eg. coolant) (fig. 2, elements 43 and 45). It is intrinsic that the Rice provides a process of assembling the structure of figure 2.

Rice does not teach both inlet and outlet passages for a blown film die. However, Smith teaches both inlet and outlet passages for a blown film die (figs. 2-3). Rice and Smith are combinable because they are from the same field of endeavor, namely, blown film dies. At the time of invention a person of ordinary skill in the art would have found it obvious to have provided another passage, like the first, in the structure of Rice, and would have been motivated to do so because Smith suggests that multiple passages may be used for both inlet and exhaust of a film cooling fluid thereby providing accurate temperature control of the formed film.

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice (US Pat. 3,932,103) in view of Smith (EP 0 626 247 A1) as applied to claims 1, 3, 4, and 8-10 above, and further in view of Schirmer (US Pat. 3,539,666).

Rice teaches the basic claimed tubular film die head as set forth above. Rice does not teach insulating a bore or fitting comprising a die passage for a fluid. However, Schirmer teaches insulating a bore or fitting comprising a die

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passage for a fluid (fig. 1, element 36). Rice and Schirmer are combinable because they are from the same field of endeavor, namely, annular extrusion film dies. At the time of invention a person of ordinary skill in the art would have found it obvious to have insulated a bore or fitting comprising a die passage for a fluid, as taught by Schirmer, in the structure of Rice, and would have been motivated to do so because Schirmer suggests that such insulation would reduce heating of a coolant when traveling through a die during operation.

Claims 1, 5, 6, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (EP 0 626 247 A1) in view of Teutsch et al. (US Pat. 5,069,612) and/or Ronden (US pat. 3,471,899).

Smith teaches a basic tubular film die head comprising: at least two components which together border areas for carrying a plastic melt in a tubular film die (figs. 2-3); an annular die gap (figs. 2-3); and a plurality of eccentrically arranged cavities in an inner wall of a die head for the transport of a fluid (inlets and exhausts) (fig. 2). It is intrinsic that the Smith provides a process of assembling the structure of figure 2.

Smith does not teach a fastener that holds together all the die components and has a passage for carrying a fluid. However, Teutsch et al. teaches a fastener that holds together all the die components and has a passage for carrying a fluid. (fig. 1, elements 142, 114, 112, 34, etc.). It is noted that Smith is silent with respect to how the die parts are held in position. Smith, Teutsch et al., and Ronden are combinable because they are from the same field of endeavor, namely, blown film dies. At the time of invention a person of ordinary skill in the art would have found it obvious to have used a clamping means having a passage for carrying a fluid, as taught by Teutsch et al., in the structure of Smith, and would have been motivated to do so because Teutsch et al. suggests such clamping means is an equivalent means for hold a die together and providing fluid passageways in a limited space. Alternatively, it is noted that Ronden provides evidence that other fasteners such as the regular hollow bolts may be used as fasteners for dies. It is submitted that a person of ordinary skill in the art would have used a hollow bolt as a clamping bolt (104 of Teutsch et al.), as a fastener in Smith, since Smith provides through holes similar to those for the clamping bolt (104) of Teutsch et al. and therefore would provide an equivalent and alternative die clamping/fastening means.

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (EP 0 626 247 A1) in view of Teutsch et al. (US Pat. 5,069,612) and/or Ronden (US pat. 3,471,899) as applied to claims 1, 5, 6, and 8-10 above, and further in view of Schirmer (US Pat. 3,539,666).

Smith teaches the basic claimed tubular film die head as set forth above. Smith does not teach insulating a bore or fitting comprising a die passage for a fluid. However, Schirmer teaches insulating a bore or fitting comprising a die passage for a fluid (fig. 1, element 36). Smith and Schirmer are combinable because they are from the same field of endeavor, namely, annular extrusion film dies. At the time of invention a person of ordinary skill in the art would have found it obvious to have insulated a bore or fitting comprising a die passage for a fluid, as taught by Schirmer, in the structure of Smith, and would have been motivated to do so because Schirmer suggests that such insulation would reduce heating of a coolant when traveling through a die during operation.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached form PTO-892.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Eashoo, Ph.D.
Primary Examiner
Art Unit 1732

2/oct/95

October 2, 2005
me